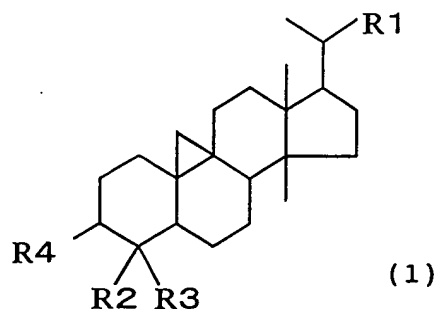


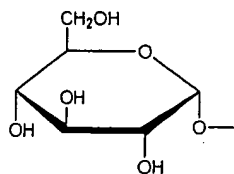
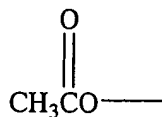
## CLAIMS

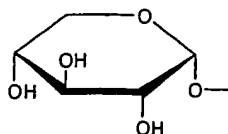
1. A drug for improving hyperglycemia, which comprises a compound represented by the following general formula (1) as an active ingredient:



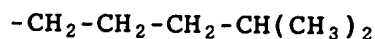
wherein R1 represents a straight or branched alkyl group having 6 to 8 carbon atoms, which may contain no double bond or 1 or 2 double bonds and may contain no hydroxyl group or carbonyl group or 1 or 2 hydroxyl groups and/or carbonyl groups, R2 and R3 each independently represent a hydrogen atom or a methyl group, and R4 forms C=O with the carbon atom constituting the ring or is a group represented by any one of the following formulas:

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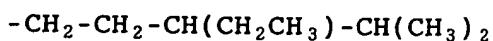




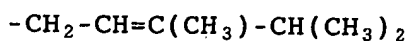
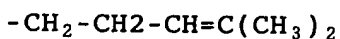
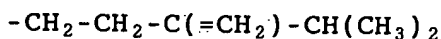
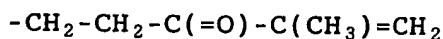
2. The drug for improving hyperglycemia according to claim 1, wherein R1 is represented by any one of the following formulas, R2 and R3 both are methyl groups, and R4 is a hydroxyl group:



(whrerein Ra is any of hydrogen atom, hydroxyl or methyl group, and Rb is hydrogen atom or hydroxyl group)



(whrerein Rc is any of hydrogen atom, hydroxyl or methyl group)

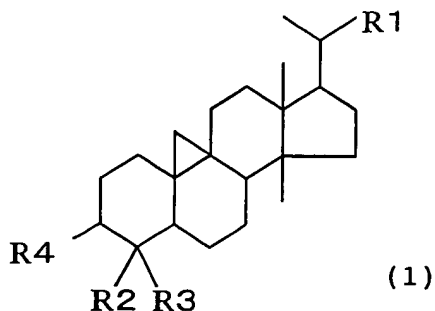


3. The drug for improving hyperglycemia according to claim 2, wherein the compound is 9,19-cyclolanostan-3-ol or 24-methylene-9,19-cyclolanostan-3-ol.

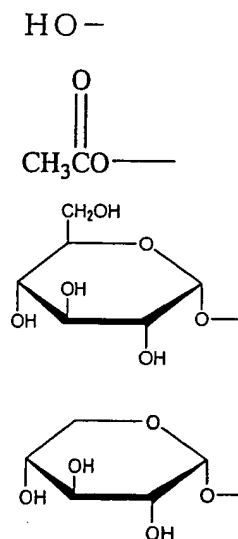
4. The drug according to any one of claims 1 to 3, which contains 0.001 to 10% by dry mass of the compound.

5. A drug for improving hyperglycemia, which comprises an organic solvent extract or hot water extract of a plant or a fraction thereof as an active ingredient and contains 0.001 to 10% by dry mass of a compound

represented by the following general formula (1):



wherein R1 represents a straight or branched alkyl group having 6 to 8 carbon atoms, which may contain no double bond or 1 or 2 double bonds and may contain no hydroxyl group or carbonyl group or 1 or 2 hydroxyl groups and/or carbonyl groups, R2 and R3 each independently represent a hydrogen atom or a methyl group, and R4 forms C=O with the carbon atom constituting the ring or is a group represented by any one of the following formulas:

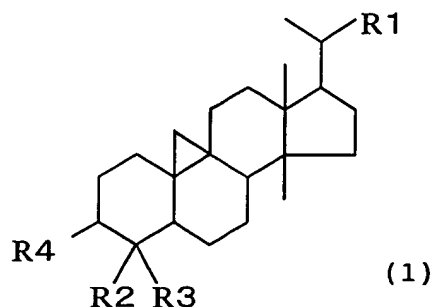


6. The drug for improving hyperglycemia according to claim 5, wherein the plant is a plant of the family

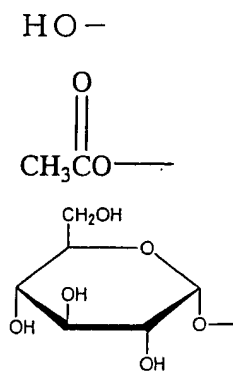
*Gramineae* or *Liliaceae*.

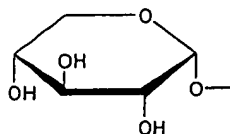
7. The drug for improving hyperglycemia according to claim 6, wherein the plant of the family *Liliaceae* is *Aloe vera* (*Aloe barbadensis* Miller).

8. Food or drink for improving hyperglycemia, which comprises a compound represented by the following general formula (1) as an active ingredient:



wherein R1 represents a straight or branched alkyl group having 6 to 8 carbon atoms, which may contain no double bond or 1 or 2 double bonds and may contain no hydroxyl group or carbonyl group or 1 or 2 hydroxyl groups and/or carbonyl groups, R2 and R3 each independently represent a hydrogen atom or a methyl group, and R4 forms C=O with the carbon atom constituting the ring or is a group represented by any one of the following formulas:

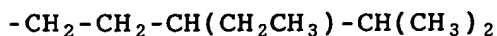




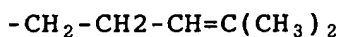
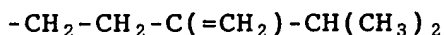
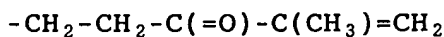
9. The food or drink for improving hyperglycemia according to claim 8, wherein R1 is represented by any one of the following formulas, R2 and R3 both are methyl groups, and R4 is a hydroxyl group:



(whrerein Ra is any of hydrogen atom, hydroxyl or methyl group, and Rb is hydrogen atom or hydroxyl group)



(whrerein Rc is any of hydrogen atom, hydroxyl or methyl group)

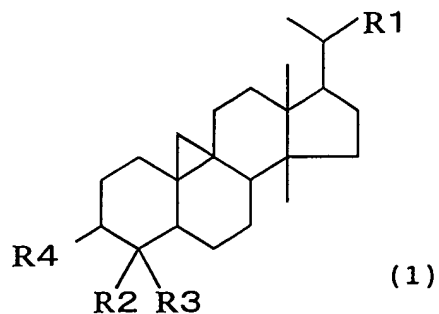


10. The food or drink for improving hyperglycemia according to claim 9, wherein the compound is 9,19-cyclolanostan-3-ol or 24-methylene-9,19-cyclolanostan-3-ol.

11. The food or drink according to any one of claims 8 to 10, which contains 0.0001 to 1% by dry mass of the compound.

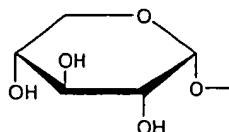
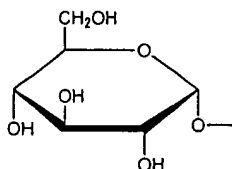
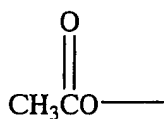
12. Food or drink for improving hyperglycemia, which comprises an organic solvent extract or hot water extract of a plant or a fraction thereof as an active ingredient

and contains 0.0001 to 1% by dry mass of a compound represented by the following general formula (1):



wherein R1 represents a straight or branched alkyl group having 6 to 8 carbon atoms, which may contain no double bond or 1 or 2 double bonds and may contain no hydroxyl group or carbonyl group or 1 or 2 hydroxyl groups and/or carbonyl groups, R2 and R3 each independently represent a hydrogen atom or a methyl group, and R4 forms C=O with the carbon atom constituting the ring or is a group represented by any one of the following formulas:

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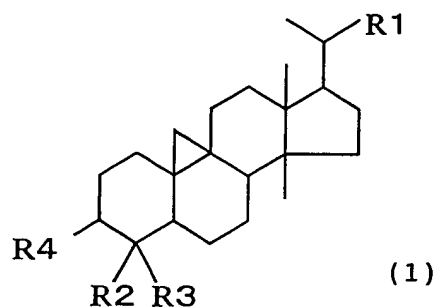
13. The food or drink for improving hyperglycemia

according to claim 12, wherein the plant is a plant of the family *Gramineae* or *Liliaceae*.

14. The food or drink for improving hyperglycemia according to claim 13, wherein the plant of the family *Liliaceae* is *Aloe vera* (*Aloe barbadensis* Miller).

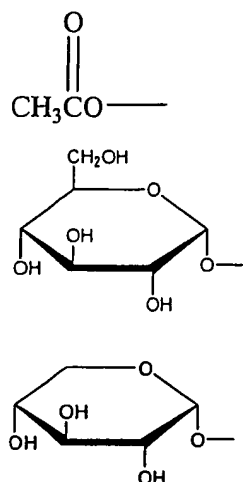
15. The food or drink according to any one of claims 8 to 14, which has a hyperglycemia improving effect, and is attached with an indication that it is used for improvement of hyperglycemia.

16. Use of a compound represented by the following general formula (1) or a composition containing the same for the production of a drug for improving hyperglycemia:



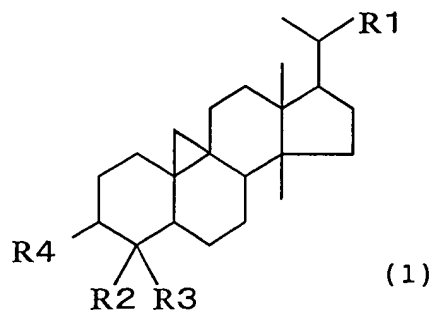
wherein R1 represents a straight or branched alkyl group having 6 to 8 carbon atoms, which may contain no double bond or 1 or 2 double bonds and may contain no hydroxyl group or carbonyl group or 1 or 2 hydroxyl groups and/or carbonyl groups, R2 and R3 each independently represent a hydrogen atom or a methyl group, and R4 forms C=O with the carbon atom constituting the ring or is a group represented by any one of the following formulas:

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17. The use according to claim 16, wherein the composition contains 0.001 to 10% by dry mass or more of the compound.

18. A method for improving hyperglycemia, which comprises administering a compound represented by the following chemical formula (1) or a composition containing the same to a subject whose hyperglycemia is to be improved:

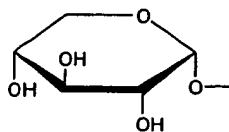
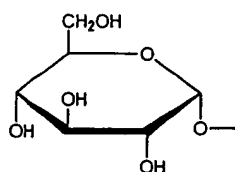
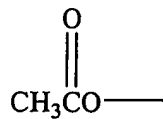


wherein  $\text{R}_1$  represents a straight or branched alkyl group having 6 to 8 carbon atoms, which may contain no double bond or 1 or 2 double bonds and may contain no hydroxyl group or carbonyl group or 1 or 2 hydroxyl groups and/or carbonyl groups,  $\text{R}_2$  and  $\text{R}_3$  each independently represent a



hydrogen atom or a methyl group, and R4 forms C=O with the carbon atom constituting the ring or is a group represented by any one of the following formulas:

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19. The method according to claim 18, wherein the composition contains 0.001 to 10% by dry mass or more of the compound.